

REMARKS

Claims 1-20 and 22-30 are all the claims pending in the application.

Claim Rejections - 35 U.S.C. § 102

Claims 1, 7-10, 13-17, 20-21, 24-25, 27 and 29 are rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Wu et al. (US 2006/0193387; hereinafter “Wu”). For *at least* the following reasons, Applicants respectfully traverse the rejection.

Claim 1

Claim 1 is related to a method of determining a reference picture for blocks constituting a current picture. Claim 1 recites, *inter alia* “wherein a motion estimation for the blocks constituting a current picture is performed by using the determined reference picture.”

Applicants respectfully submit that Wu fails to teach “wherein a motion estimation for the blocks constituting a current picture is performed by using the determined reference picture.”

In view of the above, Applicants respectfully submit that Wu does not anticipate claim 1. Also, Applicants submit that claims 2-7, being dependent on claim 1, should be allowable *at least* by virtue of their dependencies as well as for their additionally recited elements.

Claim 8

Applicants submit that claim 8 is patentable for the following reasons. Claim 8 is related to a method of determining a reference picture. Claim 8 recites, *inter alia*:

- (a) performing a motion estimation process on blocks
constituting a portion of a current picture by using pictures

indicated by a reference index list, and determining the reference picture based on a result of the motion estimation process; and

(b) monitoring the determined reference picture, and determining a reference picture for blocks constituting another portion of the current picture based on a result of the monitoring process.

Wu fails to teach or suggest “performing a motion estimation process on blocks constituting a portion of a current picture by using pictures indicated by a reference index list.”

Item 610 of Wu is a hard disk drive, item 611 of Wu is a floppy disk drive, and item 612 of Wu is CD-ROM drive (see Fig. 6). Paragraph [0009] of Wu discloses a tagging a parent frame in the hierarchical summary and paragraph [0039] of Wu discloses a motion compensation process which involves a reference image. However, Wu does NOT disclose a reference index list and Wu's motion compensation process is NOT performed by using pictures indicated by a reference index list. Thus, Applicants submit that Wu fails to teach or suggest “performing a motion estimation process on blocks constituting a portion of a current picture by using pictures indicated by a reference index list.”

Wu also fails to teach or suggest “monitoring the determined reference picture, and determining a reference picture for blocks constituting another portion of the current picture based on a result of the monitoring process.”

Wu's key frame extraction method is based on dominant global direction clusters of camera motion estimated from compressed video data (para. [0032]). In paragraphs [0039] and [0040], Wu discloses using a reference picture, a forward prediction macro-block and a bi-directional temporal prediction macro-block. In paragraph [0041], Wu discloses that not all frames have motion block vectors and in paragraph [0042], Wu discloses converting the backward (block) motion vectors to forward (block) motion vectors, which is just a change of reference and direction.

However, Wu does not disclose **monitoring** a determined reference picture and determining another reference picture for blocks constituting **another portion** of a current picture **based on the result of the monitoring process**. Thus, Applicants respectfully submit that Wu fails to teach or suggest "monitoring the determined reference picture, and determining a reference picture for blocks constituting another portion of the current picture based on a result of the monitoring process."

In view of the above, Applicants respectfully submit that Wu does not anticipate claim 8. Also, Applicants submit that claims 9, 10, and 13, being dependent on claim 8, should be allowable *at least* by virtue of their dependencies as well as for their additionally recited elements.

Claim 14

Applicants submit that claim 14 is patentable for the following reasons. Claim 14 is related to a method of determining a reference picture. Claim 14 recites, *inter alia*:

- (a) performing a motion estimation process by using a recent picture;
- (b) if a resulting value of the motion estimation process is not more than a predetermined threshold value, determining the recent picture as the reference picture; and
- (c) if a resulting value of the motion estimation process is more than a predetermined threshold value, determining the reference picture by using pictures indicated by the reference index list, wherein (c) comprises (c3) preparing the reference index list.

Wu fails to teach or suggest “if a resulting value of the motion estimation process is not more than a predetermined threshold value, determining the recent picture as the reference picture.”

In paragraph [0007], Wu discloses using a threshold method to determine scene changes. Wu does NOT disclose using a predetermined threshold value to determine a reference picture. Thus, Applicants respectfully submit that Wu fails to teach or suggest “if a resulting value of the motion estimation process is not more than a predetermined threshold value, determining the recent picture as the reference picture.”

Wu also fails to teach or suggest “if a resulting value of the motion estimation process is more than a predetermined threshold value, determining the reference picture by using pictures

indicated by the reference index list, wherein (c) comprises (c3) preparing the reference index list.”

As discussed above, Wu does NOT disclose a reference index list and Wu’s motion compensation process, disclosed in paragraph [0039], is NOT performed by using pictures indicated by a reference index list. Additionally, Wu is altogether silent regarding any preparation of a reference index list. Thus, Applicants submit that Wu fails to teach or suggest “if a resulting value of the motion estimation process is more than a predetermined threshold value, determining the reference picture by using pictures indicated by the reference index list, wherein (c) comprises (c3) preparing the reference index list.”

In view of the above, Applicants respectfully submit that Wu does not anticipate claim 14. Also, Applicants submit that claims 15-17 and 20, being dependent on claim 14, should be allowable *at least* by virtue of their dependencies as well as for their additionally recited elements.

Claims 24, 27 and 29

Independent claims 24, 27, and 29 should be allowable for reasons analogous to those discussed above in conjunction with claim 8. Accordingly, Applicants respectfully submit that Wu does not anticipate independent claim 24, 27, and 29. Also, Applicants submit that claim 25, being dependent on claim 24, should be allowable *at least* by virtue of its dependency as well as for its additionally recited elements.

Claim Rejections - 35 U.S.C. § 103

Claims 2-3, 5-6, 10-12, 17-19, 26, 28, and 30 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Wu in view of Gelissen (US 2005/0114887; hereinafter “Gelissen”).

Claims 2-3, 5-6, 10-12, 17-19, 26, 28, and 30 depend from claims 1, 8, 14, 24, 27, or 29. Gelissen does not cure the deficient teachings of Wu with respect to claims 1, 8, 14, 24, 27, and 29. Therefore, claims 2-3, 5-6, 10-12, 17-19, 26, 28, and 30, being dependent on one of claims 1, 8, 14, 24, 27, and 29, are patentable *at least* by virtue of their dependencies.

Conclusion

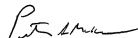
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.114(c)
U.S. Application No.: 10/828,417

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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